## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	<u> 10/031, 158 B</u>
Source:	TRWO
Date Processed by STIC:	11/21/2005

## ENTERED



**IFW** 

RAW SEQUENCE LISTING DATE: 11/21/2005
PATENT APPLICATION: US/10/031,158B TIME: 09:58:29

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11212005\J031158B.raw

```
3 <110> APPLICANT: Pastan, Ira
         Essand, Magnus
 4
 5
         Lee, Byungkook
 6
         Vasmatzis, George
 7
         Wolfgang, Curt
         The Government of the United States of America
 8
         as represented by the Secretary of the
 9
         Department of Health and Human Services
12 <120> TITLE OF INVENTION: T-Cell Receptor Gamma Alternate Reading Frame Protein,
         (TARP) and Uses Thereof
15 <130> FILE REFERENCE: 4239-61854-01
17 <140> CURRENT APPLICATION NUMBER: 10/031,158B
18 <141> CURRENT FILING DATE: 2002-01-11
20 <150> PRIOR APPLICATION NUMBER: PCT/US00/19039
21 <151> PRIOR FILING DATE: 2000-07-12
23 <150> PRIOR APPLICATION NUMBER: US 60/157,471
24 <151> PRIOR FILING DATE: 1999-10-01
26 <150> PRIOR APPLICATION NUMBER: US 60/143,560
27 <151> PRIOR FILING DATE: 1999-07-13
29 <160> NUMBER OF SEQ ID NOS: 33
31 <170> SOFTWARE: PatentIn Ver. 2.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 27
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
41 <400 > SEQUENCE: 1
                                                                       27
42 aacttggaag ggrgaacraa gtcagtc
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 27
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
53 <400> SEQUENCE: 2
                                                                       27
54 agtactaaaa cgctgtcaaa aacagcc
57 <210> SEQ ID NO: 3
58 <211> LENGTH: 24
59 <212> TYPE: DNA
60 <213> ORGANISM: Artificial Sequence
62 <220> FEATURE:
63 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
```

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\11212005\J031158B.raw

65 <400> SEQUENCE: 3 66 ttggacttgg attatcaaaa gtgg 24 69 <210> SEQ ID NO: 4 70 <211> LENGTH: 24 71 <212> TYPE: DNA 72 <213> ORGANISM: Artificial Sequence 74 <220> FEATURE: 75 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 77 <400> SEQUENCE: 4 78 ttgggcagtt ggaacaacct gaaa. 81 <210> SEQ ID NO: 5 82 <211> LENGTH: 28 83 <212> TYPE: DNA 84 <213> ORGANISM: Artificial Sequence 86 <220> FEATURE: 87 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 89 <400> SEQUENCE: 5 90 gataaacaac ttgatgcaga tgtttccc 93 <210> SEQ ID NO: 6 94 <211> LENGTH: 28 95 <212> TYPE: DNA 96 <213> ORGANISM: Artificial Sequence 98 <220> FEATURE: 99 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 101 <400> SEQUENCE: 6 28 102 gggaaacatc tgcatcaagt tgtttatc 105 <210> SEQ ID NO: 7 106 <211> LENGTH: 27 107 <212> TYPE: DNA 108 <213> ORGANISM: Artificial Sequence 110 <220> FEATURE: 111 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 113 <400> SEQUENCE: 7 114 ctggagcttt gtttcagcaa ttgaagg 27 117 <210> SEQ ID NO: 8 118 <211> LENGTH: 27 119 <212> TYPE: DNA 120 <213> ORGANISM: Artificial Sequence 122 <220> FEATURE: 123 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 125 <400> SEQUENCE: 8 27 126 ctcaagaaga caaaggtatg ttccagc 129 <210> SEQ ID NO: 9 130 <211> LENGTH: 25 131 <212> TYPE: DNA 132 <213> ORGANISM: Artificial Sequence 134 <220> FEATURE: 135 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer

137 <400> SEQUENCE: 9

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11212005\J031158B.raw

25 138 ttatgatttc tctccattgc agcag 141 <210> SEQ ID NO: 10 142 <211> LENGTH: 25 143 <212> TYPE: DNA 144 <213> ORGANISM: Artificial Sequence 146 <220> FEATURE: 147 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 149 <400> SEQUENCE: 10 150 gaagttacta tgagcttagt ccctt 25 153 <210> SEQ ID NO: 11 154 <211> LENGTH: 24 155 <212> TYPE: DNA 156 <213> ORGANISM: Artificial Sequence 158 <220> FEATURE: 159 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 161 <400> SEQUENCE: 11 162 aagctttgtt ccgggaccaa atac 24 165 <210> SEQ ID NO: 12 166 <211> LENGTH: 24 167 <212> TYPE: DNA 168 <213> ORGANISM: Artificial Sequence 170 <220> FEATURE: 171 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer 173 <400> SEQUENCE: 12 24 174 tacctgtgac aacaagtgtt gttc 177 <210> SEQ ID NO: 13 178 <211> LENGTH: 1027 179 <212> TYPE: DNA 180 <213> ORGANISM: Homo sapiens 182 <220> FEATURE: 183 <221> NAME/KEY: CDS 184 <222> LOCATION: (74)..(247) 185 <223> OTHER INFORMATION: Coding region for PS-TCR gamma 1 polypeptide (TARP) 188 <220> FEATURE: 189 <221> NAME/KEY: CDS 190 <222> LOCATION: (247)..(579) 191 <223> OTHER INFORMATION: Coding region for PS-TCR gamma 2 polypeptide (deduced amino acid sequence not displayed along with DNA sequence, due to 192 overlapping CDS's) 193 196 <400> SEQUENCE: 13 197 gggcaagagt tgggcaaaaa aatcaaggta tttggtcccg gaacaaagct tatcattaca 60 199 gataaacaac ttg atg cag atg ttt ccc cca agc cca cta ttt ttc ttc Met Gln Met Phe Pro Pro Ser Pro Leu Phe Phe 200 201 1 203 ctt caa ttg ctg aaa caa agc tcc aga agg ctg gaa cat acc ttt gtc 204 Leu Gln Leu Lys Gln Ser Ser Arg Arg Leu Glu His Thr Phe Val

207 ttc ttg aga aat ttt tcc ctg atg tta tta aga tac att ggc aag aaa

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\11212005\J031158B.raw

208 Phe Leu Arg Asn Phe Ser Leu Met Leu Leu Arg Tyr Ile Gly Lys Lys 209 30 247 211 aga aga gca aca cga ttc tgg gat ccc agg agg gga aca cca 212 Arg Arg Ala Thr Arg Phe Trp Asp Pro Arg Arg Gly Thr Pro 50 55 215 tgaagactaa cgacacatac atgaaattta gctggttaac ggtgccagaa aagtcactgg 307 217 acaaagaaca cagatgtatc gtcagacatg agaataataa aaacggagtt gatcaagaaa 367 219 ttatctttcc tccaataaaq acggatgtca tcacaatgga tcccaaagac aattgttcaa 427 221 aagatgcaaa tgatacacta ctgctgcagc tcacaaacac ctctgcatat tacatgtacc 487 223 tectectget ceteaagagt gtggtetatt ttgccateat cacetgetgt etgettagaa 547 225 qaacqqcttt ctgctgcaat ggagagaaat cataacagac ggtggcacaa ggaggccatc 607 227 ttttcctcat cggttattgt ccctagaagc gtcttctgag gatctagttg ggctttcttt 667 229 ctgggtttgg gccatttcag ttctcatgtg tgtactattc tatcattatt gtataacggt 727 231 tttcaaacca gtgggcacac agagaacctc actctgtaat aacaatgagg aatagccacg 787 233 gegateteca geaceaatet etecatgttt tecacagete etecageeaa eecaaatage 847 235 geetgetata gtgtagaeat eetgeggett etageettgt eeetetetta gtgttettta 907 237 atcagataac tgcctggaag cctttcattt tacacgccct gaagcagtct tctttgctag 967 239 ttgaattatg tggtgtgttt ttccgtaata agcaaaataa atttaaaaaa atgaaaagtt 1027 242 <210> SEQ ID NO: 14 243 <211> LENGTH: 58 244 <212> TYPE: PRT 245 <213> ORGANISM: Homo sapiens 247 <400> SEQUENCE: 14 248 Met Gln Met Phe Pro Pro Ser Pro Leu Phe Phe Leu Gln Leu Leu 5 10 251 Lys Gln Ser Ser Arg Arg Leu Glu His Thr Phe Val Phe Leu Arg Asn 20 254 Phe Ser Leu Met Leu Leu Arg Tyr Île Gly Lys Lys Arg Arg Ala Thr 255 35 257 Arg Phe Trp Asp Pro Arg Arg Gly Thr Pro 258 50 261 <210> SEQ ID NO: 15 262 <211> LENGTH: 111 263 <212> TYPE: PRT 264 <213> ORGANISM: Homo sapiens 266 <400> SEQUENCE: 15 267 Met Lys Thr Asn Asp Thr Tyr Met Lys Phe Ser Trp Leu Thr Val Pro 268 270 Glu Lys Ser Leu Asp Lys Glu His Arg Cys Ile Val Arg His Glu Asn 20 25 273 Asn Lys Asn Gly Val Asp Gln Glu Ile Ile Phe Pro Pro Ile Lys Thr 274 35 276 Asp Val Ile Thr Met Asp Pro Lys Asp Asn Cys Ser Lys Asp Ala Asn 50 55 277 279 Asp Thr Leu Leu Cln Leu Thr Asn Thr Ser Ala Tyr Tyr Met Tyr 70 75 282 Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala Ile Ile Thr Cys 285 Cys Leu Leu Arg Arg Thr Ala Phe Cys Cys Asn Gly Glu Lys Ser

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\11212005\J031158B.raw

```
286
                                    105
                                                         110
289 <210> SEQ ID NO: 16
290 <211> LENGTH: 16
291 <212> TYPE: PRT
292 <213 > ORGANISM: Homo sapiens
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Partial amino acid sequence of TARP (residues
         42-57)
296
298 <400> SEQUENCE: 16
299 Gly Lys Lys Arg Arg Ala Thr Arg Phe Trp Asp Pro Arg Arg Gly Thr
                      5
                                         10
303 <210> SEQ ID NO: 17
304 <211> LENGTH: 16
305 <212> TYPE: PRT
306 <213> ORGANISM: Dictyostelium discoideum
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Partial amino acid sequence of Tupl (dTup,
         residues 521-536)
312 <400> SEQUENCE: 17
313 Gly Ser Lys Asp Arg Ser Val Gln Phe Trp Asp Pro Arg Asn Gly Thr
                                         10
                    - 5
317 <210> SEQ ID NO: 18
318 <211> LENGTH: 16
319 <212> TYPE: PRT
320 <213> ORGANISM: Saccharomyces cerevisiae
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Partial amino acid sequence of Tup1 (yTup1,
324 residues 626-660)
326 <400> SEQUENCE: 18
327 Gly Ser Lys Asp Arg Gly Val Leu Phe Trp Asp Lys Lys Ser Gly Asn
328
    1
331 <210> SEQ ID NO: 19
332 <211> LENGTH: 41
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
339 <400> SEQUENCE: 19
340 ttacagataa acaacttgat acagatgttt cccccaagcc c
                                                                       41
343 <210> SEQ ID NO: 20
344 <211> LENGTH: 39
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
351 <400> SEQUENCE: 20
                                                                       39
352 gggcttgggg gaaacatctg tatcaagttg tttatctgt
355 <210> SEQ ID NO: 21
356 <211> LENGTH: 36
```

VERIFICATION SUMMARY

DATE: 11/21/2005

PATENT APPLICATION: US/10/031,158B

TIME: 09:58:30

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11212005\J031158B.raw